

IV. When Songbirds Sing the Blues

Participate in a felt storyboard presentation

Objectives

Students will:

- describe the significance of habitat loss on people and wildlife.
- hypothesize about changes in their own neighborhoods.
- connect bird population decline to habitat loss and human population growth.

Subjects

Science, Social Studies, Language Arts

Suggested time

30 minutes

Materials

In Kit:



• Felt Storyboard
• Script "My
Changing
Neighborhood"

My Changing Neighborhood

Getting Ready

- ✓ Tack up the large felt background to a firm surface.
- ✓ Sort the felt pieces (frogs together, birds together, etc.).
- ✓ After the introduction, select some students to assist in putting up the felt pieces when indicated. Give one student all the snakes, another the turtles, and so on. Have the helpers sit on the floor next to the storyboard.

Procedure

Introduction

Invite students to think about the neighborhood in which they live.

Do any of you know when your home was built? How do you know? If you don't know, can you guess how long ago your home was built? What clues did you use to make your guess?

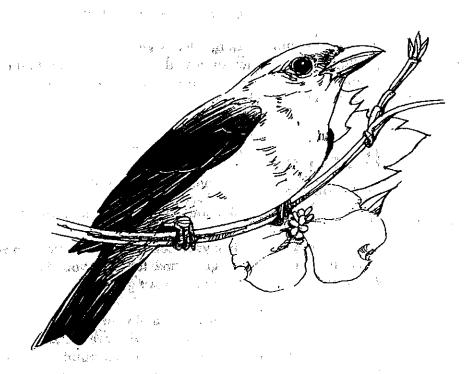
Try to make a picture in your mind of your home right now and then the whole neighborhood around it. If there are any neighbors' houses, picture them. Try to see any other buildings, any trees, streets, things that are made by people and things that are natural. Picture the animals that live in your neighborhood. Store your picture in your memory.

Now imagine that you have entered a time machine and you have been transported back in time to your neighborhood. But now it is 50 years ago. What year would that be? Picture your neighborhood fifty years ago. Do you think your neighborhood would look different from the way it looks now? How?

The story I'm about to share with you is a true story of a boy growing up in Virginia in the 1950s. As the years passed, the boy grew up to be a biologist. He is still living and his name is John Terborgh. Dr. Terborgh studies migratory birds and their habitats.

As a result of his research, Dr. Terborgh became concerned about the problems that migratory birds are facing. He wrote a book about the biology and conservation of birds that migrate to the tropical regions of the Americas. In the beginning of his book, he tells this story of growing up in his neighborhood.

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My Changing Neighborhood

Script

Adapted with permission from Where Have All the Birds Gone? by John Terborgh, Princeton University Press, 1989, pp. 3-6.

I am an adult now with children of my own, but once I was young like you. (Put up figure of child next to house.)

When I was young, I lived with my family on a small farm in Virginia. (Place gold house with red trim at the end of the lane.) Our house was the last house on a narrow dirt lane (sewn on) that led to town. Behind the house a narrow path led through the woods to a quiet creek (sewn on) and then beyond to a bluff overlooking the river (sewn on). In all that distance, the path passed by only one house. (Put up white house near the marsh by the stream).

The land was full of trees--oak and maple, poplar and pine. (Put up the trees.) The woods and stream were my playground. Since none of the neighbors had kids my age, I spent my days in the woods looking for snakes and salamanders or fishing in the river. In the spring and summer the land was covered with wildflowers. By mid-day the colorful wings of butterflies would fill the air. (Put up the butterflies.) Red admirals and little blues, sulphurs and swallowtails would sip nectar from the flowers. I would spot the bark-colored mourning cloaks patrolling the woods. My favorites were the bright, orange monarchs that we found in the milkweed patch.

I spent many warm summer hours playing along the stream where I remember seeing raccoons, beaver and otter. (Put up the mammals)

One day my uncle took me out to watch birds and for the first time I began to really notice them. I did what most birders do. I began to keep a list of all the birds I saw. Since we lived in the woods, there were many birds. (begin putting up birds) Yellow-billed Cuckoos, Scarlet Tanagers, Red-eyed Vireos, Peewees and other birds nested along the creek. Eventually, my list grew to over 150 species. One of my fondest memories of the time was drifting off to sleep in the lingering twilight of early summer, being serenaded by a chorus of Whip-poor-wills.

Birds were not the only songsters to liven the evenings. There were frogs and toads (put up frogs) in the marsh and along the creek and river. Spring peepers and wood frogs showed up after the first warm rain in March. Then came the toads and the swamp cricket frogs. Suddenly one day the temperature would soar into the eighties and the tune would change. That evening, there would be green frogs and gray tree frogs. The last to add their voices were the bullfrogs.

Harder to find, but more exciting to discover, were the snakes. (Put up snakes). There were many species: pilot and racer blacksnakes, garter snakes, green snakes, water snakes, mole snakes, queen snakes, worm snakes.

Of all the reptiles, the most common were the box turtles. (Put up turtles) There were dozens of them, so we were forever having to stop the lawnmower to put one out of the way. They were a special nuisance in the garden where they bit out chunks of the tomatoes as they became ripe. Occasionally, while fishing or exploring along the river, I remember finding soft shelled and snapping turtles lurking just beneath the surface of the water.

(As you tell this part of the story, take down the animals displaced by the roads, houses, etc.)

Over 40 years have gone by since then. It would be impossible for you to have those same experiences in my neighborhood. Things have changed. For one thing, there are a lot more people living in the area. Where there used to be 20,000, there are now 200,000. You can't put many more people in an area without changing things.

The dirt lane that used to end at our house is now a major road. (Cover dirt lane with long highway across the bottom.) And there are many houses near ours. (Put up gold and gray suburban houses above the road on the lower right side.) Another highway was built to get to the new mall (Put up the mall in the upper right beyond the river and put short highway along the right side.)

Fortunately, because my brother found a rare orchid (put up lady's slipper near the confluence of the creek and river) The Nature Conservancy bought some of the land behind our house and made it into a preserve. But the land beyond the marsh is now developed and there is a big apartment building beside the river. (Put up red apartment building in upper left corner).

In spite of these changes, the trees along the creek are still there. What about the wildlife? I wish I could say that it is very much the same, but it is not.

The beaver and otter are gone from the river, and to make a tennis court, our neighbors across the creek filled in the little marsh where the frogs lived. (Take down frogs and cover the marsh with a tennis court). Spring evenings since then have been silent except the rush of passing cars. (Put up cars & trucks) The snakes, too, have vanished, but I am less sure about the reasons why. (Take down any remaining snakes.) A few box turtles still survive, but finding one nowadays is a rare event. (Take down remaining turtles except one). The colorful carpets of wildflowers have given way to acres of neatly mown lawns; and without the flowers, butterflies are scarce. (Take down most butterflies.)

What about the birds? There are still lots of them. The robins, mockingbirds, woodpeckers, and chickadees are still around. But the birds on our property are different from the ones we saw in 1950. My memory won't let me forget the thrushes, warblers, vireos, flycatchers and tanagers that used to sing in the woods along the creek. Now none of them are there and they have not been there for a long time. (*Take down rest of brightly colored birds*.)

The beautiful colors and songs of birds are fading from our forests and fields. In these quieter springs, I find myself wondering more and more: where have all the songbirds gone?

Discussion

- Where did the songbirds go? What about the turtles, snakes and frogs?
- Why did so many animals live in John Terborgh's neighborhood 40 years ago? Why are so many gone now?
- Why did some kinds of birds stay in the neighborhood? Can birds adapt to changes in their habitats?
- Could some birds move away and try to find a new home? What would they look for? What do birds need in order to survive?
- What would happen to a bird that couldn't adapt to changes or find another place to live?

To encourage thoughtful responses and maximize the number of students who think about a question, consider asking students to write answers to some of these questions before offer-

ing an answer. After writing, have students pair up to share their thoughts or notes. Then call the class together to share what they discussed.

- Have there been changes in our community, too? Think about your schoolyard or your neighborhood. What do you think these areas looked like before they were developed? What birds might have lived there? Are they there now?
 - Should the land that birds use as habitat be taken by people who also need it for homes or jobs? Do people have a right to make a living or live in the homes they want?
- Is a warbler more or less important than your house?
- Why do people develop natural areas into shopping malls or use poisons to create perfect lawns? Can and should people's attitudes be changed?



Assessment

Student Reflections

Have students record their thoughts about the story in their journals. Suggested writing prompts include:



Listening to this story made me feel... One thing that worries me is... If I could change the world, I would... We should save birds because...

Teacher Reflections

- ☐ Could students describe the significance of habitat loss on people and wildlife?
- ☐ Could they hypothesize about changes in their own neighborhoods?
- Were any students interested in finding out more about changes in their community?
- ☐ Did students connect population decline to habitat loss and human population growth?

Branching Out

My Bird-Friendly Neighborhood

Recreate the story "My Changing Neighborhood" so that it is more friendly to birds. Have students think of ways that development could have been modified or interventions could have occurred that would have preserved or restored habitat. Create felt pieces to add to the new story.

Changes in the Land

Find out how the land in the students' neighborhoods or schoolyard have changed over the years. Assign students to interview people who have lived in the area for at least twenty years. Develop a question-naire that asks a number of questions that will give a picture of how the landscape has changed. For example, "How has the area around our school changed? What was here before the school? Do you remember any plants or animals that were here in the past that you don't see around any more?" Draw pictures or collect photographs of landscapes then and now. Discover if there has been habitat loss or fragmentation in the community. Discuss the positive and negative aspects of development.

Write Your Own Neighborhood Story

Using the information gathered through interviewing older residents of the community and obtaining historical records, write your own version of the changing landscape of the local community. Have students create their own script and felt story pieces that tell a local story.

Local Land Development

Locate public officials to learn about local land use issues. Find out how to learn about hearings and provide public input on land use decisions. Have students find out about zoning regulations in their area and what laws and regulatory agencies deal with development in the community. Find out how land use decisions are made in Latin America. How might that affect migratory bird conservation?

Where's My Home?

Ask students to write a story about a warbler returning to its nesting grounds only to find a shopping mall in its place.